#### **DEPARTMENT OF TRANSPORTATION**

#### **Federal Aviation Administration**

**14 CFR Part 39** 

[Docket No. FAA-2023-1046; Project Identifier AD-2023-00253-T]

**RIN 2120-AA64** 

**Airworthiness Directives; The Boeing Company Airplanes** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 757-200, -200CB, and -300 series airplanes. This proposed AD was prompted by a report of a crack at fuselage station (STA) 1640 frame web common to the lower hinge intercostal tee clip inboard and center holes of the upper fastener row. This proposed AD would require a maintenance records check for existing repairs at STA 1640, repetitive ultrasonic (UT) inspections for cracking of the frame web, and applicable on-condition actions. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC

Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

*AD Docket*: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-1046; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Boulevard, MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website: myboeingfleet.com.
- You may view this service information at the FAA, Airworthiness Products

  Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov by searching for and locating Docket No. FAA-2023-1046.

  FOR FURTHER INFORMATION CONTACT: Wayne Ha, Aviation Safety Engineer, Continued Operational Safety Branch, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: 562-627-5238; email: wayne.ha@faa.gov.

# **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2023-1046; Project Identifier AD-2023-00253-T" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal,

explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

#### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Wayne Ha, Aviation Safety Engineer, Continued Operational Safety Branch, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: 562-627-5238; email: wayne.ha@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The FAA has received a report of a 0.16-inch crack at STA 1640 frame web common to the lower hinge intercostal tee clip inboard and center holes of the upper fastener row on a 757-200 airplane with 27,754 flight cycles and 79,425 flight hours. The

crack was found by an operator accomplishing a frame segment replacement as part of a repair following Boeing Service Bulletin 757-53A0108 inspections (which is required by AD 2020-20-10, Amendment 39-21266 (85 FR 63002, October 6, 2020) (AD 2020-20-10)). AD 2020-20-10 requires an inspection of the STA 1640 fuselage frame between S-11 and S-16 for existing frame repairs or replacements, a detailed inspection for any crack, nick, or gouge, and repetitive high frequency eddy current (HFEC) and low frequency eddy current (LFEC) inspections for cracking and repair. The FAA issued AD 2020-20-10 to address cracking of the fuselage frame at STA 1640, which could result in reduced structural integrity of the airplane.

A damage tolerance analysis showed that existing Maintenance Planning Data (MPD) tasks and the inspections specified in Boeing Alert Service Bulletin 757-53A0108 are not adequate to find any crack in the STA 1640 frame web area common to the lower hinge intercostal tee clip inboard and center holes of the upper fastener row. This STA 1640 frame web crack is attributed to fatigue caused by flight loads and pressurization of the fuselage with higher than predicted stresses at this location. Additionally, for airplanes with Aviation Partners Boeing (APB) blended or scimitar blended winglets installed in accordance with Supplemental Type Certificate (STC) ST01518SE, the compliance times will be reduced by a factor of two compared to airplanes without these winglets. This condition could result in an undetected crack in the STA 1640 frame web common to the lower hinge intercostal tee clip inboard and center holes of the upper fastener row. Such cracking if not addressed, could result in the inability of a principal structural element to sustain limit loads which could adversely affect the structural integrity of the airplane.

#### **FAA's Determination**

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

#### Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022. This service information specifies procedures for a maintenance records check of the left and right side STA 1640 frame web between S-9 and S-20 for existing repair; repetitive UT inspections of the frame web for any cracks; and applicable on-condition actions. On-condition actions include repair.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES section.

# Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described except for any differences identified as exceptions in the regulatory text of this proposed AD. For information on the procedures and compliance times, see this service information at regulations.gov under Docket No. FAA-2023-1046.

## **Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 309 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Maintenance records check	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$26,265
Ultrasonic inspection	39 work-hour X \$85 per hour = \$3,315 per inspection cycle	\$0	\$3,315 per inspection cycle	\$1,024,335 per inspection cycle

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this proposed AD.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the

various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive: **The Boeing Company:** Docket No. FAA-2023-1046; Project Identifier AD-2023-00253-T.

#### (a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

### (c) Applicability

This AD applies to The Boeing Company Model 757-200, -200CB, and -300 series airplanes, certificated in any category, as identified in Boeing Alert Requirements

Bulletin 757-53A0121 RB, dated September 28, 2022.

## (d) Subject

Air Transport Association (ATA) of America Code: 53, Fuselage.

### (e) Unsafe Condition

This AD was prompted by a report of a crack at fuselage station (STA) 1640 frame web common to the lower hinge intercostal tee clip inboard and center holes of the upper fastener row. This condition, if not addressed, could result in the inability of a principal structural element to sustain limit loads, which could adversely affect the structural integrity of the airplane.

### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 757-53A0121, dated September 28, 2022, which is referred to in Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022.

#### (h) Exceptions to Service Information Specifications

(1) Where the Compliance Time columns of the tables in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022, use the phrase "the original issue date of Requirements Bulletin 757-53A0121 RB," this AD requires using "the effective date of this AD."

- (2) Where Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022, specifies contacting Boeing for repair instructions or for alternative inspections: This AD requires doing the repair, or doing the alternative inspections and applicable on-condition actions using a method approved in accordance with the procedures specified in paragraph (i) of this AD.
- (3) For airplanes with Aviation Partners Boeing (APB) blended or scimitar blended winglets installed in accordance with Supplemental Type Certificate (STC) ST01518SE: This AD requires dividing the applicable compliance times and repeat intervals specified in in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022, by a factor of two.

## (i) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Continued Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-SACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Continued Operational Safety Branch, FAA, to make those findings. To be

approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

# (j) Related Information

For more information about this AD, contact Wayne Ha, Aviation Safety Engineer, Continued Operational Safety Branch, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: 562-627-5238; email: wayne.ha@faa.gov.

# (k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Boeing Alert Requirements Bulletin 757-53A0121 RB, dated September 28, 2022.
  - (ii) [Reserved]
- (3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Boulevard, MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website: myboeingfleet.com.
- (4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on May 11, 2023.

Gaetano A. Sciortino, Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service. [FR Doc. 2023-11584 Filed: 5/31/2023 8:45 am; Publication Date: 6/1/2023]